Vienna Instruments
Solo Download Instruments
Triple Horn
Full Library

Contents

Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Triple Horn. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

"Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1_perf_leg_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

Major and minor runs are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109-127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

Note: the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the "perf-leg_sus" Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different "e" tones; with sus-legato you won't.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	lo	long
		ma	major
150, 160, …	150, 160, … BPM (beats per minute)	marc	marcato
1s, 2s, …	tone length 1 sec., 2 sec., …	me	medium
acc	accelerando	mi	minor
all	combination of all Patches of a category	mord	mordent
		mu	muted
arp	arpeggio	muA, muB	muted, variation A/B
blare	"blared" tones (horn)	nA	normal attack
cre	crescendo	noVib	without vibrato
dim	diminuendo	perf-rep	repetition performance
dm	diminished (arpeggios)	por	portato
dyn	dynamics (crescendo and diminuendo)	run	octave run
		sA	soft attack
dyn5, dyn9	dynamics, 5/9 repetitions	sl	slow
fa	fast	sta, stac	staccato
faT	fast triplets	sto	stopped (horns)
fA	fast attack	str	strong
fA_auto	attack automation (normal/fast attack)	sus	sustained
		T	triplets
fast-rep	fast repetitions	tune	"tuning in" articulation
flatter	flutter tonguing	UB	upbeat
fx	effect sound	UB-a1, -a2	1, 2 upbeats
gliss	glissando	v1, v2 …	1st, 2nd, … variation
hA	hard attack	Vib	with (medium) vibrato
leg	legato	Vib-progr	progressive vibrato
li	light	XF	cell crossfade Matrix

Articulations

55 Horn-Triple	
01 SHORT + LONG NOTES	Staccato Portato short and medium Sustained
02 DYNAMICS	Light crescendo and diminuendo, 1.5, 2, 3, and 4 sec. Medium crescendo and diminuendo, 1.5, 2, 3, 4, and 6 sec. Strong crescendo and diminuendo, 2, 3, 4, and 6 sec. pfp, 2, 3, 4 and 8 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER	Flutter tonguing normal and crescendo
10 PERF INTERVAL	Legato Marcato
11 PERF INTERVAL FAST	Legato Marcato
12 PERF TRILL	Trills, legato, minor to major 2nd
13 PERF REPETITION	Legato Portato Staccato Dynamics for all repetitions
14 FAST REPETITION	Staccato, 9 repetitions, 140 to 180 BPM Normal and dynamics
15 UPBEAT REPETITION	1–3 upbeats, 90–140, 160, 180, and 200 BPM

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.

1	1st and 2nd violin	
2	Viola	
3	Cello	
4	Double bass	
5	Harp	
6	Concert flute, piccolo	
7	Oboe, English horn	
8	Clarinet, bass clarinet	
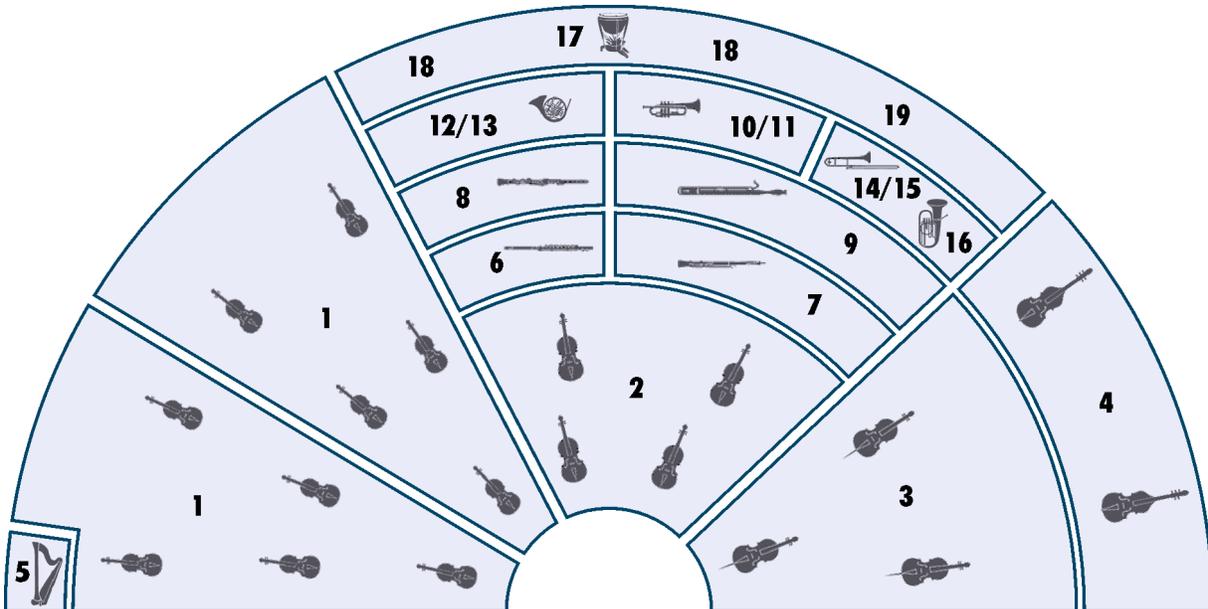
9	Bassoon, contrabassoon
10/11	Trumpet
12/13	Horn
14/15	Trombone
16	Tuba
17	Timpani
18	Drums, cymbals
19	other percussion instruments

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

55 Horn-Triple

Patches

01 SHORT + LONG NOTES   Range: A1–G5

01 HO2_staccato   **Samples: 360**   **RAM: 22 MB**

Staccato
4 velocity layers
4 Alternations

02 HO2_portato_short   **Samples: 360**   **RAM: 22 MB**

Portato, short
4 velocity layers
4 Alternations

03 HO2_portato_medium   **Samples: 358**   **RAM: 22 MB**

Portato, medium
4 velocity layers
4 Alternations

21 HO2_sus   **Samples: 316**   **RAM: 19 MB**

Sustained
4 velocity layers
Release samples

02 DYNAMICS   Range: A1–G5

01 HO2_dyn-li_1'5s   **Samples: 138**   **RAM: 8 MB**

Light crescendo and diminuendo, 1.5 sec.
3 velocity layers
AB switch: crescendo/diminuendo

02 HO2_dyn-li_2s   **Samples: 138**   **RAM: 8 MB**

Light crescendo and diminuendo, 2 sec.
3 velocity layers
AB switch: crescendo/diminuendo

03 HO2_dyn-li_3s   **Samples: 138**   **RAM: 8 MB**

Light crescendo and diminuendo, 3 sec.
3 velocity layers
AB switch: crescendo/diminuendo

| **04 HO2_dyn-li_4s** | **Samples: 138** | **RAM: 8 MB** |

Light crescendo and diminuendo, 4 sec.
3 velocity layers
AB switch: crescendo/diminuendo

| **11 HO2_dyn-me_1'5s** | **Samples: 180** | **RAM: 11 MB** |

Medium crescendo and diminuendo, 1.5 sec.
2 velocity layers
AB switch: crescendo/diminuendo

| **12 HO2_dyn-me_2s** | **Samples: 180** | **RAM: 11 MB** |

Medium crescendo and diminuendo, 2 sec.
2 velocity layers
AB switch: crescendo/diminuendo

| **13 HO2_dyn-me_3s** | **Samples: 180** | **RAM: 11 MB** |

Medium crescendo and diminuendo, 3 sec.
2 velocity layers
AB switch: crescendo/diminuendo

| **14 HO2_dyn-me_4s** | **Samples: 180** | **RAM: 11 MB** |

Medium crescendo and diminuendo, 4 sec.
2 velocity layers
AB switch: crescendo/diminuendo

| **15 HO2_dyn-me_6s** | **Samples: 92** | **RAM: 5 MB** |

Medium crescendo and diminuendo, 6 sec.
2 velocity layers
AB switch: crescendo/diminuendo

| **21 HO2_dyn-str_2s** | **Samples: 46** | **RAM: 2 MB** |

Strong crescendo and diminuendo, 2 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **22 HO2_dyn-str_3s** | **Samples: 46** | **RAM: 2 MB** |

Strong crescendo and diminuendo, 3 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **23 HO2_dyn-str_4s** | **Samples: 46** | **RAM: 2 MB** |

Strong crescendo and diminuendo, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

| **24 HO2_dyn-str_6s** | **Samples: 46** | **RAM: 2 MB** |

Strong crescendo and diminuendo, 6 sec.
1 velocity layer
AB switch: crescendo/diminuendo

31 HO2_pfp_2s	**Samples: 46**	**RAM: 2 MB**

Crescendo-diminuendo, 2 sec.
2 velocity layers

32 HO2_pfp_3s	**Samples: 46**	**RAM: 2 MB**

Crescendo-diminuendo, 3 sec.
2 velocity layers

33 HO2_pfp_4s	**Samples: 46**	**RAM: 2 MB**

Crescendo-diminuendo, 4 sec.
2 velocity layers

34 HO2_pfp_8s	**Samples: 23**	**RAM: 1 MB**

Crescendo-diminuendo, 8 sec.
1 velocity layer

41 HO2_fp	**Samples: 45**	**RAM: 2 MB**

Fortepiano
1 velocity layer
2 Alternations

42 HO2_sfz	**Samples: 45**	**RAM: 2 MB**

Sforzato
1 velocity layer
2 Alternations

43 HO2_sffz	**Samples: 45**	**RAM: 2 MB**

Sforzatissimo
1 velocity layer
2 Alternations

03 FLATTER	**Range: A1–G5**	

01 HO2_flatter	**Samples: 88**	**RAM: 5 MB**

Flutter tonguing
1 velocity layer
Release samples

02 HO2_flatter_cre	**Samples: 45**	**RAM: 2 MB**

Flutter tonguing, crescendo
1 velocity layer

10 PERF INTERVAL   Range: A1–G5

01 HO2_perf-legato   Samples: 1206   RAM: 75 MB

Legato
2 velocity layers
Release samples

02 HO2_perf-marcato   Samples: 1206   RAM: 75 MB

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST   Range: A1–G5

01 HO2_perf-legato_fa   Samples: 1414   RAM: 88 MB

Legato, fast
2 velocity layers
Release samples

02 HO2_perf-marcato_fa   Samples: 1414   RAM: 88 MB

Marcato, fast
2 velocity layers
Release samples

12 PERF TRILL   Range: A1–G5

01 HO2_perf-trill   Samples: 1996   RAM: 124 MB

Performance trills, legato, minor to major 2nd
2 velocity layers
Release samples

13 PERF REPETITION   Range: A1–G5

01 HO2_perf-rep_leg   Samples: 345   RAM: 21 MB

Repetition performances: Legato
3 velocity layers

02 HO2_perf-rep_por   Samples: 621   RAM: 38 MB

Repetition performances: Portato
3 velocity layers

03 HO2_perf-rep_sta   **Samples: 621**   **RAM: 38 MB**

Repetition performances: Staccato
3 velocity layers

21 HO2_perf-rep_dyn5_leg   **Samples: 230**   **RAM: 14 MB**

Repetition performances: Legato dynamics, 5 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

22 HO2_perf-rep_dyn9_por   **Samples: 414**   **RAM: 25 MB**

Repetition performances: Portato dynamics, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

23 HO2_perf-rep_dyn9_sta   **Samples: 414**   **RAM: 25 MB**

Repetition performances: Staccato dynamics, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

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14 FAST REPETITION   **Range: A1–G5**

01 HO2_fast-rep_140 (150/160/170/180)   **Samples: 69**   **RAM: 4 MB**

Fast repetitions: 140–180 BPM
3 velocity layers
Release samples

11 HO2_fast-rep_140_dyn (150/160/170/180)   **Samples: 46**   **RAM: 2 MB**

Fast repetitions: Dynamics, 140–180 BPM
1 velocity layer
AB switch: crescendo/diminuendo

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15 UPBEAT REPETITION   **Range: A1–G5**

A Single Upbeat   **Range: A1–G5**

01 HO2_UB-a1_90 (100/110/120/130/140/160/180/200)   **Samples: 69**   **RAM: 4 MB**

1 upbeat, 90–140, 160, 180, and 200 BPM
3 velocity layers

B Double Upbeats   **Range: A1–G5**

01 HO2_UB-a2_90 (100/110/120/130/140/160/180/200)   **Samples: 69**   **RAM: 4 MB**

2 upbeats, 90–140, 160, 180, and 200 BPM
3 velocity layers

C Triple Upbeats	**Range: A1–G5**		

01 HO2_UB-a3_90 (100/110/120/130/140/160/180/200)		**Samples: 69**	**RAM: 4 MB**

3 upbeats, 90–140, 160, 180, and 200 BPM
3 velocity layers

16 GLISSANDI	**Range: A1–F#5**		

01 HO2_perf-gliss	**Range: A1–G5**	**Samples: 471**	**RAM: 29 MB**

Glissando, minor 3rd to octave
1 velocity layer
Release samples

11 HO2_gliss-5		**Samples: 40**	**RAM: 2 MB**

Glissando, 4th
1 velocity layer
AB switch: up/down

12 HO2_gliss-6		**Samples: 38**	**RAM: 2 MB**

Glissando, diminished 5th
1 velocity layer
AB switch: up/down

13 HO2_gliss-7		**Samples: 38**	**RAM: 2 MB**

Glissando, 5th
1 velocity layer
AB switch: up/down

14 HO2_gliss-8		**Samples: 36**	**RAM: 2 MB**

Glissando, minor 6th
1 velocity layer
AB switch: up/down

15 HO2_gliss-9		**Samples: 36**	**RAM: 2 MB**

Glissando, major 6th
1 velocity layer
AB switch: up/down

16 HO2_gliss-10		**Samples: 34**	**RAM: 2 MB**

Glissando, minor 7th
1 velocity layer
AB switch: up/down

17 HO2_gliss-11		**Samples: 34**	**RAM: 2 MB**

Glissando, major 7th
1 velocity layer
AB switch: up/down

18 HO2_gliss-12	**Samples: 34**	**RAM: 2 MB**

Glissando, octave
1 velocity layer
AB switch: up/down

19 HO2_gliss-12-slow	**Samples: 33**	**RAM: 2 MB**

Glissando, slow, octave
1 velocity layer
AB switch: up/down

98 RESOURCES

Isolated dynamics repetitions: Legato, portato, and staccato
Single layer long notes

01 Perf Rep dyn	**Range: A1–G5**

01 HO2_rep_cre5_leg-1 (2/3/4/5)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions
Legato, crescendo, 1st to 5th note
1 velocity layer

01 HO2_rep_dim5_leg-1 (2/3/4/5)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions
Legato, diminuendo, 1st to 5th note
1 velocity layer

02 HO2_rep_cre9_por-1 (2/3/4/5/6/7/8/9)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions: Portato, crescendo, 1st to 9th note
1 velocity layer

02 HO2_rep_dim9_por-1 (2/3/4/5/6/7/8/9)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions: Portato, diminuendo, 1st to 9th note
1 velocity layer

03 HO2_rep_cre9_sta-1 (2/3/4/5/6/7/8/9)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions: Staccato, crescendo, 1st to 9th note
1 velocity layer

03 HO2_rep_dim9_sta-1 (2/3/4/5/6/7/8/9)	**Samples: 23**	**RAM: 1 MB**

Extracted repetitions: Staccato, diminuendo, 1st to 9th note
1 velocity layer

02 Long Notes - Single Layer   Range: A1–G5

01 HO2_sus_p_noVib   **Samples: 90   RAM: 5 MB**

Sustained, piano, without vibrato
1 velocity layer
Release samples

02 HO2_sus_mp_noVib   **Samples: 90   RAM: 5 MB**

Sustained, mezzopiano, without vibrato
1 velocity layer
Release samples

03 HO2_sus_f_noVib   **Samples: 90   RAM: 5 MB**

Sustained, forte, without vibrato
1 velocity layer
Release samples

04 HO2_sus_ff_noVib   **Samples: 46   RAM: 2 MB**

Sustained, fortissimo, without vibrato
1 velocity layer
Release samples

99 RELEASE

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 HO2 Articulation Combi
Samples: 1351   **RAM: 84 MB**

Single note articulations
Staccato, portato short, sustained, crescendo-diminuendo 2 and 4 sec., fortepiano and sforzato, flutter tonguing normal and crescendo

	C1	C#1	D1	D#1	E1
V1	staccato	sustained	pfp 2s.	fp	flutter
V2	port. short	sustained	pfp 4s.	sfz	flutter cres.

L1 HO2 Perf-Legato Speed
Samples: 1590   **RAM: 99 MB**

Interval performances
Legato normal and fast
Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
legato	normal	fast

L1 HO2 Perf-Repetitions Combi
Samples: 1587   **RAM: 99 MB**

Repetition performances
Legato
Portato
Staccato

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato
V2	portato
V3	staccato

Matrix - LEVEL 2 A - Advanced

O1 HO2 Perf-Universal
Samples: 3090   **RAM: 193 MB**

Interval performances
Legato normal and fast
Marcato normal and fast
Speed controller

Matrix switches: Horizontal: Speed, 2 zones   Vertical: Modwheel, 2 zones

	H1	H2
legato	normal	fast
marcato	normal	fast

02 HO2 Perf-Trill Speed   **Samples: 2262   RAM: 141 MB**

Multi interval performances
Legato and trills
Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
V1	legato no vib.	trills

03 HO2 Short+Long notes - All   **Samples: 1394   RAM: 87 MB**

Single notes
Staccato, portato short and medium, and sustained

Matrix switches: Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	staccato	port. short	port.med.	sustained

Matrix - LEVEL 2 B - Standard

11 HO2 Perf-Legato Speed   **Samples: 1590   RAM: 99 MB**

Interval performances
Legato normal and fast
Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
legato	normal	fast

12 HO2 Perf-Marcato Speed   **Samples: 1590   RAM: 99 MB**

Interval performances
Marcato normal and fast
Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
marcato	normal	fast

13 HO2 Dynamics - Small   **Samples: 675   RAM: 42 MB**

Dynamics
Medium crescendo and diminuendo, 2, 3, and 4 sec.
Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 4 zones

	C1	C#1	D1
dyn.medium	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

14 HO2 Dynamics - Large   Samples: 1526   RAM: 95 MB

Dynamics
Light crescendo and diminuendo, 2, 3, and 4 sec.
Medium and strong crescendo and diminuendo, 2, 3, 4, and 6 sec.
Crescendo-diminuendo, 2, 3, 4, and 8 sec.
Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C1–D#1   Vertical: Modwheel, 5 zones

	C1	C#1	D1	D#1
dyn.light	2 sec.	3 sec.	4 sec.	4 sec.
dyn.medium	2 sec.	3 sec.	4 sec.	6 sec.
dyn.strong	2 sec.	3 sec.	4 sec.	6 sec.
pfp	2 sec.	3 sec.	4 sec.	8 sec.
fp/sfz/sffz	fp	sfz	sffz	sffz

15 HO2 Flatter   Samples: 133   RAM: 8 MB

Flutter tonguing
Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

Matrix - LEVEL 2 C - Repetitions

31 HO2 Perf-Repetitions - Combi   Samples: 1587   RAM: 99 MB

Repetition performances
Legato, portato, and staccato

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	legato	portato	staccato

32 HO2 Perf-Repetitions - Speed   Samples: 1587   RAM: 99 MB

Repetition performances
Legato, portato, and staccato
Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
V1	legato	portato	staccato

33 HO2 Fast-Repetitions   Samples: 414   RAM: 25 MB

Fast repetitions: Staccato, 140–180 BPM

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
speed/BPM	140	150	160	170	180

34 HO2 Upbeats a1   Samples: 621   RAM: 38 MB

Repetitions: 1 upbeat, 90–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
speed/BPM	90	100	110	120	130	140	160	180	200

35 HO2 Upbeats a2   Samples: 621   RAM: 38 MB

Repetitions: 2 upbeats, 90–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
speed/BPM	90	100	110	120	130	140	160	180	200

36 HO2 Upbeats a3   Samples: 621   RAM: 38 MB

Repetitions: 3 upbeats, 90–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
speed/BPM	90	100	110	120	130	140	160	180	200

37 HO2 Upbeats all   Samples: 1863   RAM: 116 MB

Repetitions: 1–3 upbeats, 90–140, 160, 180, and 200 BPM

Matrix switches: Horizontal: Keyswitches, C1–G#1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
1 upbeat	90	100	110	120	130	140	160	180	200
2 upbeats	90	100	110	120	130	140	160	180	200
3 upbeats	90	100	110	120	130	140	160	180	200

Matrix - LEVEL 2 E - Keyswitch Vel

71 HO2 Legato - cre5   Samples: 115   RAM: 7 MB

Legato notes: Crescendo, keyswitch velocity
Keyswitches control 5 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

72 HO2 Portato - cre9   Samples: 207   RAM: 12 MB

Portato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

73 HO2 Staccato - cre9 **Samples: 207** **RAM: 12 MB**

Staccato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

74 HO2 Combi - cre9 **Samples: 414** **RAM: 25 MB**

Portato and staccato: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

75 HO2 Legato - dim5 **Samples: 115** **RAM: 7 MB**

Legato notes: Diminuendo, keyswitch velocity
Keyswitches control 5 dynamic steps

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

76 HO2 Portato - dim9 **Samples: 207** **RAM: 12 MB**

Portato notes: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

77 HO2 Staccato - dim9 **Samples: 207** **RAM: 12 MB**

Staccato notes: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

78 HO2 Combi - dim9 **Samples: 414** **RAM: 25 MB**

Portato and staccato: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C1–G#1   Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

Presets

HO2 VSL Preset Level 1   **Samples: 4438**   **RAM: 277 MB**

L1 HO2 Perf-Legato Speed
L1 HO2 Articulation Combi
L1 HO2 Perf-Repetitions Combi
Preset keyswitches: C6–D6

HO2 VSL Preset Level 2   **Samples: 7408**   **RAM: 463 MB**

01 HO2 Perf-Universal
02 HO2 Perf-Trill Speed
L1 HO2 Articulation Combi
31 HO2 Perf-Repetitions - Combi
74 HO2 Combi - cre9
Preset keyswitches: C6–E6